



# Tech Info Library

## Okidata Microline 92A printer: Using it with a IIc

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Security: Everyone

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Before you attempt to use an Okidata Microline 92A printer with an Apple IIc, be aware that the configuration of the printer at shipment is such that the Apple IIc is initially unable to recognize whether the printer is busy. In other words, if you attempt to send text to the printer as it arrives from the factory, all text from your Apple IIc will indeed be sent, but only the text that first fills the printer buffer will actually be printed (about 2K). The remaining text will be lost.

This problem stems from the fact that the printer sends a "Supervisory Send Data (SSD)" signal when it needs to tell the Apple IIc to stop sending data--usually when the printer buffer is full and needs to be emptied before it can receive any more. If the IIc doesn't recognize that SSD signal and stop sending data, that data is lost. And, in fact, the IIc DOES ignore the SSD signal: it's used to looking at the "Data Terminal Ready" (DTR) signal to determine when and when not to send data. The Okidata printer, however, only uses the DTR signal to tell the Apple IIc when it's not on-line, when its power is off, or when it's out of paper--not when it's busy.

The solution to this problem is quite straightforward: simply connect the "busy signal" of the printer to the DTR signal of the IIc by making sure that "SP1" and "SP2" on the serial interface card in the rear inside of the printer are both set to SIDE B. (They are connected to the two leftmost pins of the connector.) This procedure switches the two signals so that the printer will operate correctly with the IIc. For further details, please refer to the Okidata manual, p. A-17, under 'Jumper Plug Functions'.

NOTE: To further enhance the printing capabilities of the printer, we suggest that you set the interface protocol on the serial card in the printer to "Printer Ready/Busy" (Centronics Unblocked) (SW9=OFF, SW10=OFF, SW11=ON). Doing so allows the IIc to access the 2K buffer in the printer, allowing the printer to print faster than if you used the "Printer Ready/Busy" (OKI Simplex Busy) protocol. When using the Centronics Unblocked protocol, there will be times when the printer will temporarily stop to fill its buffer with text before continuing printing. This is normal.

--Serial Interface Settings:

No changes need to be made to the Serial Interface settings. The defaults work perfectly.

--AppleWorks Printer Setting:

Printer codes for utilizing the features of this printer are as follows:

4 characters per inch	---->	CTRL- <u></u>
10 characters per inch	---->	CTRL-^
12 characters per inch	---->	CTRL-
17 characters per inch	---->	CTRL-]

6 lines per inch	---->	ESC-6
8 lines per inch	---->	ESC-8

Boldface Begin	---->	ESC-T
Boldface End	---->	ESC-I

Subscript Begin	---->	ESC-L
Subscript End	---->	ESC-M

Superscript Begin	---->	ESC-J
Superscript End	---->	ESC-K

Underline Begin	---->	ESC-C
Underline End	---->	ESC-D

Correspondence Quality	---->	ESC-1	These two codes may have to be exchanged for Bold Begin/End
Data Processing Quality	--->	ESC-0	

Apple Technical Communications

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